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Statistical Bulletin

METROPOLITAN LIFE INSURANCE COMPANY

Volume 24 SEPTEMBER 1943 *Number 9*

Will the Axis Resort to Gas Warfare?

THE capitulation of Italy brings the specter of defeat closer to the remaining Axis powers. In a desperate attempt to turn the tide, it is conceivable that Germany or Japan may resort to the indiscriminate and large-scale use of poison gas. What the chances are that chemical warfare would succeed in spreading panic and suffering among the Allied civilian populations and military forces, may be judged by the results of gas warfare in the first World War.

The use of poison gas in modern warfare was initiated by Germany in April 1915, when French and Canadian troops near Ypres were attacked with clouds of chlorine gas. The Allied forces, surprised and wholly unprepared for such weapon, suffered fairly heavy losses in the very first attack—20,000 casualties, 5,000 of them fatal. The Allies accepted the challenge, and through intensive efforts were able to retaliate in kind by September of that year. Thereafter, the tempo of gas warfare increased steadily on both sides as manufacturing facilities were rapidly expanded and as troops were trained in the use of this new weapon. Thus the tonnage of war gases used in 1918 was more than 1½ times that for the year before and four times that used in 1916.

Prentiss,* an authority on chemical warfare, has estimated, that the total number of casualties from gas in the first World War amounted to 1,300,000, of which 91,000 were fatal. The fatality rate for gas casualties was thus 7 percent, as against about 25 percent for nongas casualties. Obviously, the fatality rates among soldiers gassed were relatively low as compared with those wounded by other means, such as shells, bullets, and bayonets. This is reflected in the fact that in the period from the beginning of chemical warfare to the end of the conflict, gas casualties were responsible for about one out of every 50 of the battle fatalities as compared with one out of every 13 of the nonfatal injuries.

Complete figures are not available on the number of gas casualties suffered in each year of the war, but there is evidence that while the total number increased as gas warfare was extended, the proportion of fatalities dropped sharply as methods of combating gas attacks improved.

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*AUGUSTIN M. PRENTISS: *Chemicals in War*. McGraw-Hill, New York, 1937. This comprehensive volume has been the source for a number of the facts and figures used in our text.

Data compiled by Prentiss on large-scale operations with poison gas indicate that in 1915 and 1916 one out of every four casualties died, but in 1917 the ratio fell to 1 in 12, and in 1918 dropped to 1 in 36.

In the first World War, American troops suffered a higher proportion of casualties from poison gas than any other army. Of our total of approximately 270,000 battle casualties from all causes, about 72,000, or more than 25 percent, were caused by gas. However, the case-fatality rate from gas injuries in our army was only 2 percent, and such fatalities comprised slightly less than 3 percent of all our battle deaths.

The high proportion of gas casualties in the total among our troops was accounted for in part by the fact that we went into action relatively late in the war, when gas warfare had reached a high point of development. On the other hand, antigas measures had increased greatly in effectiveness, and the low case fatality experienced by our army in the first World War reflected the limitations of poison gas against well-protected troops.

The Russian army had the highest number of poison gas casualties, estimated at 475,000, of which 56,000, or more than 10 percent, proved fatal. The number of Russian soldiers killed by gas was greater than the total of such losses in all other armies combined. Troops of the British Empire and of France each suffered about 190,000 gas casualties; Germany and Austria together probably had about 300,000.

In view of these facts regarding the potentialities of gas warfare, it appears that the Axis would gain little by introducing this military weapon in the present conflict. Not only are Allied troops well protected against this contingency, but they are likewise prepared to retaliate.

Nor would the use of chemical warfare against civilians prove to be of much value to the Axis. In the first place, it is doubtful whether sufficiently high concentrations of gas could be developed over large enough areas to cause a considerable number of casualties. Furthermore, the populations of our Allies in Europe have been trained in antigas measures. Even if the Axis powers were foolhardy enough to use poison gas against civilian populations, the chances are that the attempt to cause panic and undermine morale would essentially fail. Air raids by Germany earlier in the war inflicted very severe losses among Allied civilians, but the spirit of these people remained quite undaunted. Above all, Germany and Japan know that if gas warfare could be used successfully against civilian populations, their cities are no less vulnerable than those of the Allies. The Axis powers have shown no hesitancy to use the most brutal and terroristic tactics, and if they thought that chemical warfare would give them an advantage, they would have employed it long before this.

While the peoples of the United Nations must continue to guard against gas warfare, it is doubtful that it will be used in the present war.

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Fatal Accidents in World War Years

WAR, quite unexpectedly, has not brought about an increase in the death rate from accidents, although under comparable conditions in 1917–1918 the accident death rate rose sharply to a very high level.

The experience among the many millions of Metropolitan Industrial policyholders in the two World War periods shows how much more favorable the accident situation has been in recent years than it was a quarter of a century ago. In 1916, the year of our preparedness program, the death rate from accidents for these policyholders rose to 73.2 per 100,000 from a rate of 67.3 in 1915. With our entry into the War in 1917, the figure rose further to 76.5, an increase of nearly 14 percent in two years. Fear that history would repeat itself was strengthened when in 1941, also a year of active preparation, the rate rose from 46.3 in the previous year to 49.9 per 100,000, an increase of 8 percent. In 1942, however, the rate actually declined somewhat; moreover, it has shown little tendency to rise so far this year. The trend of the accident death rate among the insured since 1911 is shown in the chart on page 4.

All the important types of accidents, except automobile and air transportation, take a smaller toll now than in 1917–1918. The death rate in 1942 for falls, the leading cause of fatal injury in the earlier period, but now outranked by automobile accidents, was only two thirds what it was in 1917–1918. At the same time, the death rates for railroad accidents and for burns have been cut about three fourths; the rate for acute poisoning (gas excepted) has been reduced by two thirds, while the rates for drownings and firearm accidents have fallen nearly one half.

Contributing to the very favorable current fatal accident picture is the fact that the death rate from occupational accidents has risen only slightly since our entry into the war. Among adult white male policyholders, the death rate for occupational accidents went up only 4 percent in 1942 over 1941, and present indications are that the rate this year will be no higher than last. The death rate for occupational accidents among adult white male policyholders was 43 percent lower in 1942 than in 1918.

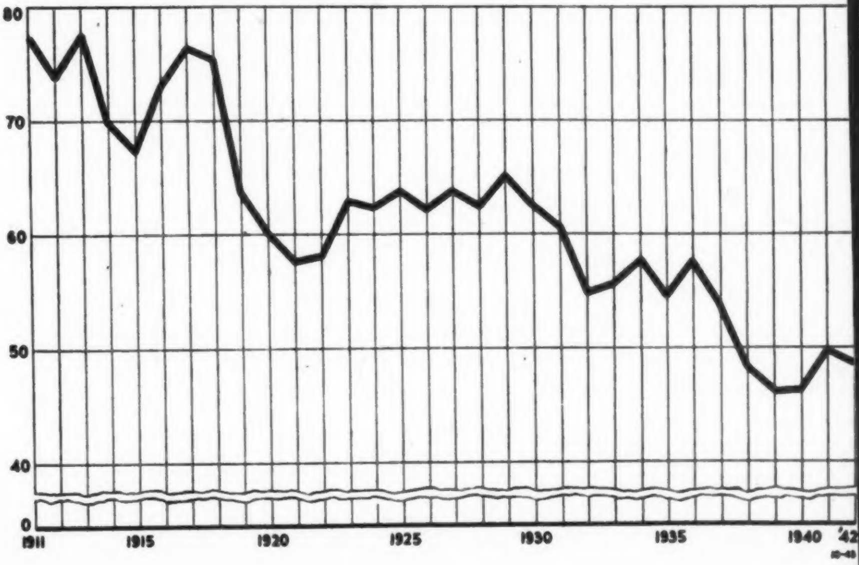
Wartime is a period when heavy loss of life is likely to occur in a single accident. This is due to the increased production of extremely hazardous substances, the increased tempo of industrial activity, and the inevitable letdown in safety precautions in all fields. Considering the vast expansion of the explosives and the chemical industries in the last few years, and the need to step up production all along the line, we have been more fortunate this time than last in the loss of life resulting from major catastrophes—those in which 50 or more persons are killed. Disasters of this magnitude took more than 1,800 lives in 1917–1918;

they have taken about half that number during the present conflict. One outstanding feature of the situation today is that even in the vastly expanded chemical and explosives industries, the largest number of lives lost in a single accident since Pearl Harbor was 54, whereas between April 1917 and November 1918 there were three accidents in explosives plants, each taking around 100 lives.

Despite the recent railroad catastrophes, the record of railroad safety since Pearl Harbor has been more favorable with respect to large-scale accidents than it was during the first World War. In the 18 months of war in 1917–1918, there were 11 railroad accidents in which 10 or more people were killed, whereas in the longer period of the present conflict there have been only five such accidents. The toll in accidents of this size was 325 lives in the first World War years, and only about 150 lives from December 1941 through September 1943.

It should be a source of real satisfaction that the total death rate from accidents among wage-earners and their families is about one third less today than it was in 1917–1918. The war effort is being aided measurably by this relative reduction in loss of life. The country has made great strides in accident prevention during this quarter century; nevertheless, the American people still pay a high toll to carelessness. Last year accidents of all types took 93,000 lives in this country.

CRUDE DEATH RATES PER 100,000 FROM ACCIDENTS (ALL FORMS)
WEEKLY PREMIUM-PAYING INDUSTRIAL BUSINESS
Metropolitan Life Insurance Company, 1911-1942



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Canadian Mortality in the War Years

THE health of the Canadian people, as measured by their mortality, has been maintained at a very favorable level during four years of global war. Of course, Canada, like the United States, has been spared the horrors of civilian bombing; yet it has suffered from the dislocations and hardships incident to the war effort. It is therefore of special interest that among the large number of Canadians insured in the Industrial Department of the Metropolitan Life Insurance Company, the mortality during the war period has been the lowest on record. For the years 1940–1942 the average death rate among these insured, including war deaths, was 5.86 per 1,000, or 3.4 percent below the rate of 6.07 recorded in the period 1937 to 1939, and 6.8 percent below the rate of 6.29 for the three prior years, 1934 to 1936. The figures in the table on page 6 tell the story in detail.

The improvement in mortality has been particularly marked for the diseases which take their heaviest toll at the younger ages. During the war years the death rate for the principal communicable diseases of childhood has declined to the lowest figure ever recorded for these policyholders. The increasing control over this group of diseases is particularly noteworthy, inasmuch as the concentration in training camps and in defense areas of large numbers of adults who had not acquired immunity in childhood increases materially the danger of serious outbreaks.

Similarly, diarrhea and enteritis, which have always been important causes of death among Canadian children, have shown considerable improvement in recent years. The average death rate from these diseases in 1940–1942 was fully one third below the figure for the three preceding years and two fifths below the average for the years 1934–1936.

Another bright spot in the health record of the Canadian policyholders is their tuberculosis experience. Although the rate of decline has been retarded in the war period, the average death rate for the years 1940 to 1942, 47.1 per 100,000, established a new minimum at a level almost one fifth below that for the period 1934–1936. The improvement in tuberculosis mortality is important not only because it represents the saving of many men and women at the prime of life, but also because it is usually a good index of the general health status of the population.

Since the beginning of the War, both civilian and military authorities have been watching carefully the trend of respiratory conditions, having in mind the catastrophic influenza pandemic which occurred toward the close of the first World War. Thus far, the record has given no cause for serious concern, although there was an outbreak of influenza which swept across Canada late in 1940 and early the following year. The use of serum and chemo-

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therapy in the treatment of pneumonia has resulted in considerable reduction in mortality from that disease. In 1942 the death rate from influenza and pneumonia combined was 36.5 per 100,000, the lowest on record among the Canadian policyholders.

Chemotherapy has likewise aided materially in reducing the mortality from appendicitis and from the diseases incidental to childbearing. For appendicitis, the average death rate during the war years was 7.2 per 100,000, or 57 percent of the figure for 1934 to 1936. The continued reduction in mortality for diseases of the puerperal state is

CRUDE DEATH RATES PER 100,000 FOR SELECTED CAUSES. ALL AGES.
WEEKLY PREMIUM-PAYING INDUSTRIAL BUSINESS IN CANADA,
METROPOLITAN LIFE INSURANCE COMPANY, 1934 TO 1942

CAUSES OF DEATH	DEATH RATES PER 100,000								
	1942	1941	1940	1939	1938	1937	1936	1935	1934
ALL CAUSES OF DEATH	593.1	603.7	562.2	586.3	590.2	644.9	626.7	638.3	622.6
Typhoid fever	1.0	1.4	1.9	1.0	2.3	2.5	1.4	2.4	2.6
Communicable diseases of childhood	8.7	8.2	9.8	13.5	16.0	22.9	14.9	21.4	17.7
Measles	.9	1.3	1.0	2.5	1.7	3.8	2.6	6.0	2.8
Scarlet fever	.9	.8	1.0	1.7	1.8	2.9	3.2	4.7	3.9
Whooping cough	3.2	2.5	4.8	4.8	5.1	8.6	4.6	6.3	7.8
Diphtheria	3.7	3.6	3.0	4.5	7.4	7.6	4.5	4.4	3.2
Influenza and pneumonia	36.5	45.3	40.5	57.1	62.3	71.3	66.2	75.6	58.1
Influenza	5.6	11.3	8.8	16.1	11.7	21.8	15.4	20.9	14.0
Pneumonia—all forms	30.9	34.0	31.7	41.0	50.6	49.5	50.8	54.7	44.1
Tuberculosis—all forms	45.8	50.4	45.1	45.8	49.2	51.4	55.9	56.0	59.6
Tuberculosis of respiratory system	38.3	42.2	35.8	37.8	38.9	41.4	44.5	45.0	46.5
Syphilis*	3.7	4.0	4.5	3.3	2.8	4.5	4.6	3.7	4.0
Cancer—all forms	85.0	85.1	81.5	75.1	77.1	74.1	75.3	71.2	69.7
Diabetes mellitus	18.0	16.4	18.1	14.5	13.6	13.2	13.5	15.4	13.3
Cerebral hemorrhage	40.3	39.0	37.0	35.8	36.4	37.1	35.4	36.1	34.7
Diseases of the coronary arteries and angina pectoris	39.1	36.2	33.5	30.6	24.0	24.2	23.4	21.8	17.8
Other chronic heart diseases†	86.8	92.3	81.1	82.7	74.4	79.1	81.8	77.9	82.3
Diarrhea and enteritis	19.7	18.5	13.6	18.3	21.5	38.2	22.1	29.2	36.3
Appendicitis	6.4	6.4	8.7	10.8	10.7	11.6	11.3	13.4	13.2
Chronic nephritis	39.9	41.9	39.5	35.8	34.7	37.7	42.1	37.3	32.8
Puerperal state—total	7.4	6.3	6.6	8.6	8.5	8.7	11.4	9.5	11.8
Total external causes	56.0	45.4	38.5	38.0	40.5	41.8	38.9	39.8	37.3
Suicides	2.5	2.4	2.4	4.1	3.4	3.1	3.4	2.9	2.8
Homicides	.3	.4	.4	.3	.5	.5	.6	.9	.3
Accidents—total	40.4	39.7	33.2	33.2	36.6	38.2	34.7	36.0	34.2
Home accidents	7.0	5.9	6.0	6.8	8.6	7.8	7.5	10.3	6.7
Occupational accidents	6.4	8.3	5.7	5.1	5.4	3.8	4.3	5.0	5.0
Motor vehicle accidents	12.7	12.2	10.2	11.2	11.9	12.3	10.5	7.8	9.0
War deaths (enemy action)	12.8	2.9	2.5	.4	—	—	.2	—	—
Other diseases and conditions	98.6	106.7	102.3	115.1	116.1	126.6	128.3	127.7	131.4

*Beginning with 1940, includes aneurysm of the aorta.

†International List titles 92, 93(c), (d), (e), and 95.

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especially noteworthy inasmuch as it has occurred during a period of increasing birth rate.

On the unfavorable side of the picture are the increases in mortality from cancer, diabetes, the diseases of the heart and arteries, and from accidents.

The effect of the War in Canada is most directly reflected in the record of deaths from enemy action. The loss of life from war deaths was small in the first two years of the conflict, the rate being less than three per 100,000 in 1940 and the year after. In 1942, however, the rate jumped sharply to 12.8. So far, for the current year, there has been a further rise, the rate in the first eight months being 27.4 per 100,000. It is quite certain, moreover, that the losses will increase with the continued invasion of enemy territory. In most other respects, fortunately, the health outlook for the Canadian people continues to be favorable.

The Cost of Feeding a Growing Child

THE Statistical Bureau of the Company is studying, as part of a larger investigation, the cost of rearing a child from birth to age 18, taking into account the cost of providing the child with food, clothing, shelter, and the other necessities of life; and as the results become available they will be reported in the BULLETIN. Inasmuch as the size of families is influenced to an increasing degree by the cost of raising children, the subject is one of prime social interest.

The present note deals with the cost of feeding a child up to age 18, at which the period of self-support may be said to begin—or, at present, the age at which the boy is called upon to enter the armed forces. The amount spent to feed a child up to adolescence varies considerably with the economic and social status of the parents. In this discussion we turn our attention to families of moderate income, namely, those in which the head of the household earns in the neighborhood of $2,500 annually. In such families food is the largest single item in the cost of rearing a child. There are, unfortunately, no records from which the figures can be read off directly, and hence the amount must be derived from data on the family budget as a whole. Using as a basis the study on family expenditures in the United States issued by the National Resources Planning Board,* we estimate that in a family of from three to six persons with an income annually of $2,500, the expenditure for food averages $680 a year. This represents actual costs so far as they can be ascertained; whether or not they provide an adequate diet does not enter into the discussion. The reader should also bear in mind that price levels used in this study pertain to 1935–1936.

In order to determine what proportion of the $680 a year is ex-

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***Family Expenditures in the United States*. National Resources Planning Board, Washington, 1941. Tables 61 and 63, pages 20 and 21.

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pended on each member of the family and in particular on the growing child, it is necessary to know the relative food consumption of each individual according to age and sex. This information, based on data published by the Bureau of Labor Statistics, appears in the table below. The unit is the diet of an average adult male, and takes into account both the amount of food consumed and its cost.

On this scale, for example, in a family of three children aged 3, 8, and 12 respectively, the youngsters consume 2.14 adult male units a year—0.51 for the youngest, 0.76 for the next child, and 0.87 for the oldest (the average for boys and girls at age 12). To this sum is added 1.82 units for the parents (1.0 for the father, and 0.82 for the mother) giving a total food consumption for the family of 3.96 adult male units. Dividing the annual expenditure for food, $680, by the number of units in the family, we find the cost per adult male unit to be $171.72 a year.

With this figure, it is a simple matter to compute the cost of feeding a growing child from year to year; the amounts are shown in the table. For the first two years of life,

RELATIVE FOOD CONSUMPTION AND ESTIMATED COST OF FEEDING
A CHILD TO AGE 18 IN A FAMILY OF 3 TO 6 PERSONS
WITH $2,500 ANNUAL INCOME

AGE	MALES		FEMALES	
	Adult Male Units Consumed*	Cost†	Adult Male Units Consumed*	Cost†
0	0.48	$82.43	0.48	$82.43
1	.48	82.43	.48	82.43
2	.51	87.58	.51	87.58
3	.51	87.58	.51	87.58
4	.58	99.60	.58	99.60
5	.58	99.60	.58	99.60
6	.58	99.60	.58	99.60
7	.76	130.51	.58	99.60
8	.76	130.51	.76	130.51
9	.84	144.24	.76	130.51
10	.84	144.24	.76	130.51
11	.90	154.55	.84	144.24
12	.90	154.55	.84	144.24
13	1.00	171.72	.84	144.24
14	1.00	171.72	.90	154.55
15	1.00	171.72	.90	154.55
16	1.02	175.15	.90	154.55
17	1.02	175.15	.90	154.55
TOTAL	13.76	$2,362.88	12.70	$2,180.87

**Money Disbursements of Wage Earners and Clerical Workers in Eight Cities in the East North Central Region*. 1934–36. By Faith M. Williams and Alice C. Hanson. Bulletin No. 636, United States Department of Labor, Bureau of Labor Statistics; Table C, page 432.

†Based on data in *Family Expenditures in the United States*. National Resources Planning Board. 1941. Tables 61 and 63, pages 20 and 21.

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the cost is a little more than $80 a year and it increases progressively with advancing age. When the child is ready to enter school, he consumes about $100 worth of food a year. Up to age 6 there is no difference in food consumption between boys and girls, but beyond this age, it costs more to feed the more active and faster growing boy. At age 17, it costs about $175 to feed a boy and almost $155 for a girl. To sum the total cost from birth to age 18, a boy consumes about $2,360 worth of food, a girl, $2,180. In other words, in families of moderate means, the cost of feeding a child to adolescence is equal to about one year's expenditure for all items in the entire family budget.

Wartime Trends in Rheumatic Fever

WAR conditions generally favor an increase in rheumatic fever among military personnel. During the first World War there was a rise in the incidence of rheumatic fever in our armed forces over the prewar level, and serious outbreaks were also reported by other belligerents.

Already in the present conflict, many cases of rheumatic fever have been reported from our armed forces. Studies of current cases among Naval personnel show a relatively high concentration among the younger enlisted men. It appears that susceptible individuals are usually attacked shortly after reporting for duty at training stations. A sizable proportion, about 40 percent, give a history of rheumatic infection in childhood. The seasonal distribution of the cases is rather typical, the peak being reached in the late winter and early spring. In the great majority of cases there is a history of recent upper respiratory infection or of scarlet fever; in the case of some of those stricken in battle areas there is a history of severe exposure or of prolonged immersion. A few of the latter have occurred in the tropics, where the disease is reputedly infrequent. It is an interesting fact that the original area of residence of the patient appears to be of less consequence than the area in which the camp or Naval station is located. Thus, rates have tended to be high in training camps in those States in which the general population normally has a high incidence of the disease.

The recent epidemic outbreaks of rheumatic fever in our armed forces, as in similar occurrences in schools and other institutions, have followed infections which in some instances were shown to be associated with certain types of streptococci. But few bacteriological studies of these outbreaks have been published. Data currently collected in military hospitals may throw further light on the relationship between streptococcal infections and rheumatic fever.

The sizable number of cases of rheumatic fever in our armed forces is of interest in another direction. In recent years the disease has more and more come to be looked upon

as essentially one of childhood origin, but this point of view may have to be modified, since in a significant proportion of the cases among military personnel there is no history of a previous attack of the disease. The study of the records of these cases may be valuable in many ways in advancing knowledge of the natural history of rheumatic fever.

It is a matter of encouragement that the war so far has caused no interruption in this country of the decline in rheumatic fever and rheumatic heart disease among young people in the general population. Among Industrial policyholders of the Metropolitan Life Insurance Company between ages 5 and 24, the death rate from rheumatic fever and from chronic heart disease (about 90 percent of which is of rheumatic origin at these ages) was 9.7 per 100,000 as compared with 32.3 in 1917–1918. Thus, in the interval between the first and second World Wars, the mortality from rheumatic fever and rheumatic heart disease among young people has declined about 70 percent. In the past five years alone the rate has fallen by one third.

In like manner the mortality from these diseases in England has also shown a sharp decline during the war period. Between 1939 and 1941 alone the number of deaths at ages under 15 has fallen more than 25 percent. The recent improvement has been ascribed by Glover* to the decreased amount of poverty as a result of full employment, to the better feeding of children during wartime, especially the increased provision of milk, and to the evacuation of school children from metropolitan centers.

Recent Publications of the Statistical Bureau

THE following studies by the Statistical Bureau of the Metropolitan Life Insurance Company have been published recently, and reprints of them will be sent upon request.

1. The Health of the Negro. Metropolitan Life Insurance Company, 1943.
2. A Program of Welfare and Progress in Health and Longevity. Chapters 20 and 21 from *A Family of Thirty Million.* The Story of the Metropolitan Life Insurance Company 1868–1943. Metropolitan Life Insurance Company, 1943.
3. The Trend of the Birth Rate Yesterday, Today, and Tomorrow. *Bulletin of the New York Academy of Medicine*, August 1943.
4. The Place of the Intrinsic Rate of Natural Increase in Population Analysis. *Proceedings of the Eighth American Scientific Congress.* Volume VIII.
5. The Progeny of an Entire Population. *The Annals of Mathematical Statistics.* June 1942.
6. Some Reflections—Statistical and Other—On a Non-Material Universe. *Journal of the American Statistical Association.* March 1943. Prepared as the Presidential Address for the annual meeting of the American Statistical Association, December 1942.

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*J. A. GLOVER: "War-Time Decline in Acute Rheumatism." *Lancet.* July 10, 1943. Page 51.

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Comparative Data on the Causes of Death Among Industrial Policyholders

The following table shows the mortality among Industrial policyholders for August 1943 and August 1942, together with the death rates for the first eight months of 1943, 1942, and 1941.

DEATH RATES* PER 100,000 POLICYHOLDERS FROM SELECTED CAUSES.
WEEKLY PREMIUM-PAYING INDUSTRIAL BUSINESS
METROPOLITAN LIFE INSURANCE COMPANY

CAUSES OF DEATH	ANNUAL RATE PER 100,000 POLICYHOLDERS*				
	August 1943	August 1942	Year to Date: End of August		
			1943	1942	1941
ALL CAUSES—TOTAL	705.1	688.8	797.1	744.0	772.5
Typhoid fever	0.6	0.5	0.3	0.3	0.5
Measles	.2	.2	.7	.6	1.1
Scarlet fever	.4	.2	.4	.4	.5
Whooping cough	1.1	.8	1.3	.9	1.3
Diphtheria	.6	.3	.7	.5	.6
Influenza	1.6	1.3	6.2	4.7	10.1
Pneumonia (all forms)	17.3	18.1	38.3	30.9	35.3
Tuberculosis (all forms)	39.6	39.3	41.2	42.6	44.3
Tuberculosis of respiratory system	35.6	36.2	37.2	38.3	40.4
Syphilis	8.2	10.3	9.7	10.9	11.5
Cancer (all forms)	94.6	103.7	105.3	104.3	103.9
Diabetes mellitus	23.1	23.0	28.5	28.3	28.6
Cerebral hemorrhage	57.0	54.3	66.8	60.6	62.1
Diseases of the coronary arteries and angina pectoris	51.6	50.1	61.4	57.4	55.0
Other chronic heart diseases†	134.7	133.2	174.4	157.7	161.1
Diarrhea and enteritis	7.1	5.9	4.0	3.9	3.9
Appendicitis	6.3	6.9	5.6	5.8	7.7
Chronic nephritis	39.4	44.7	51.1	50.5	53.1
Puerperal state—total	4.9	3.8	4.4	4.4	4.7
Suicides	5.9	6.3	6.4	7.4	7.4
Homicides	2.6	3.2	3.1	3.8	3.6
Accidents—total	63.4	57.3	52.1	51.8	50.3
Home accidents	9.3	8.9	12.0	11.6	11.3
Occupational accidents	6.8	8.4	6.5	7.0	**
Motor vehicle accidents	12.6	15.3	11.8	17.5	19.8
War deaths (enemy action)	12.0	3.1	11.3	4.0	.3
All other causes of death	132.6	122.6	123.8	112.5	125.6

*The rates for 1943 are subject to slight correction, since they are based on provisional estimates of lives exposed to risk.

†International List (1940) titles 92, 93 (c), (d), (e), and 95.

**Not available.

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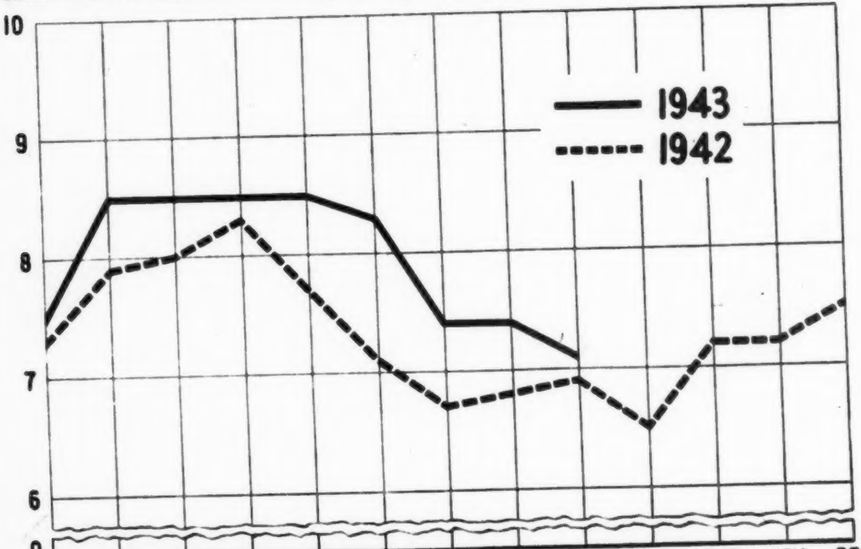
MORTALITY FROM ALL CAUSES

METROPOLITAN LIFE INSURANCE COMPANY
INDUSTRIAL DEPARTMENT, WEEKLY PREMIUM-PAYING BUSINESS

DEATH RATES PER 1,000 · ANNUAL BASIS (*1943 figures are provisional*)



	(DEC)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1942		7.9	8.0	8.3	7.7	7.1	6.7	6.8	6.9	6.5	7.2	7.2	7.5
1943		8.5	8.5	8.5	8.5	8.3	7.4	7.4	7.1				

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